

**CPx**

# **USERS MANUAL - COMBINATION ACTION**

## DEFINITION

The organ controller incorporates a fully featured combination action providing complete integration and programmability of all general and divisional pistons, special function pistons, reversibles, and crescendo pedal. The **'SET'** piston is used which defines this as a 'capture' type combination action. A USB Flash Drive port is used for combination action storage, enabling the idea of 'memory levels' and personal ownership of these combination action settings. 100 memory levels are formatted per flash drive. The general pistons, divisional pistons, and organist programmable reversibles can be set or captured independently for each memory level while the fortissimo and crescendo pedal can be organist programmed on memory level 100 only. The LCD display provides communication with the organist for a complete and exact status check of the options selected.

## OVERVIEW OF OPERATION

**Set:** To 'capture' in memory a desired group of stops and couplers, simply turn on the stops and couplers desired, then hold the SET piston in while selecting the correct piston or toe stud.

**General Pistons:** These control all stops and couplers, when selected, the stops and/or couplers 'captured' in memory will be so turned on/off, and will move on/off to visually indicate their position.

**Divisional Pistons:** These control the stops and intra-manual couplers of the particular division, when selected, the stops and/or couplers 'captured' in memory will be so turned on/off, and will move on/off to visually indicate their position.

**General Cancel:** This physically turns off all stops and couplers that are on. It also turns off the Fortissimo, Pd/Gt, Transposer, and manual interchanges. Depending on the Piston Sequence type, it may zero or turn off this function.

**Programmable Cancels:** These physically turn off all stops and couplers that pertain to these pistons.

**Reversible Pistons:** These can control any stop or coupler by the means of reversing their position, that is if a stop is on, then it will be turned off, or if it is on then it will be turned off. The stops and/or couplers will physically move indicating their position.

**Fortissimo:** This allows the control to turn ON stops and/or couplers without actually moving them as the general pistons do. Any or all of the stops and couplers can be operated by this piston which acts as a reversible, meaning that if on, then off and if off, then on. When selected on, either the word FORTISSIMO or SFORZANDO or TUTTI or FULL ORGAN will appear on the top line of the LCD, and the stops/couplers defined in

memory will be turned on or added to the stops which are physically selected. When selected off or reversed, these same stops/couplers will be turned off leaving only the stops and couplers physically selected to remain on. This Fortissimo function is turned off by the cancel piston. For a physical representation of the stops and couplers captured in memory, select the '**IND**' piston while the FORTISSIMO is on and the crescendo pedal is off. This function is programmable by the organist on Memory Level 100 only, where to 'set' or 'capture' in memory the stops and couplers currently in the on position, hold in the '**SET**' piston while selecting the fortissimo piston.

Crescendo Pedal: Controls up to thirty-two(32) stages, each stage being thought of as a general piston with control over all stops and couplers, and is indicated by a digital display on the LCD. These stages allow the stops and couplers captured in memory to be added to the stops which are physically selected. For a physical representation of the stops/couplers captured in memory, select the '**IND**' piston while the desired crescendo stage is active on the LCD and the FORTISSIMO is off. This crescendo pedal function is programmable by the organist on Memory Level 100 only, where to 'set' or 'capture' in memory the stops and couplers currently in the on position, hold in the '**SET**' piston while selecting the '**IND**' piston.

Memory Level UP and DOWN: These increment or decrement the memory level from 1 to the maximum. They can be held in for a quicker scroll to the desired number or level. A display of current memory level is in the lower left hand corner of the LCD.

Transpose UP and DOWN pistons: These transpose the keyboards through a loop of halfsteps. This loop starts with seven halfsteps up, indicated on the 4<sup>th</sup> line of the LCD by +1 to +7, wraps back to seven halfsteps down, indicated by -7, and back to zero or no transposition. For each increment or decrement one of these pistons must be hit. The cancel piston returns this loop to zero or no transposition.

Pedal to Great: When playing on the Great keyboard, the lowest note being held will be played by the pedal division and not by the Great division, up to the 32 note limit of the pedalboard. When selected, the LCD will indicate PD/GT on the fourth line. This piston acts as a reversible, again, on if off and off if on. The General Cancel clears this function.

French: This interchanges the Great keyboard with the Choir keyboard. The divisional pistons (8 maximum) and Div/Pd reversible will be exchanged as well. Indication of the function when on is by the letter F on the 4<sup>th</sup> line of the LCD. This piston acts as a reversible, and the General Cancel will turn off this option. All keys must be off for this function to toggle, either by the reversible piston or the General Cancel.

Pos/Ch Transfer: This interchanges the Positiv keyboard with the Choir keyboard. The divisional pistons (8 maximum) and Div/Pd reversible will be exchanged as well. Indication of the function being on is by the physical position of the coupler only, and only one manual transfer is allowed to be on at a

time, meaning that turning on the Pos/Ch transfer will automatically turn off the Gt/Ch transfer coupler if on, and visa-versa. As with the Gt/Ch transfer, all keys must be off for this function to toggle.

**Indicate:** This piston will give a physical readout of the stops and/or couplers set or captured in memory by the Fortissimo or the Crescendo pedal stages. In order for this to happen, the Fortissimo must be on or a Crescendo stage must be active. If both are on, the Fortissimo takes precedence.

**Player/Menu:** This piston accesses menus for Play, Record, Delete, MIDI, and Piston Sequence. It is a reversible piston, allowing the console to return to normal operation when it is selected again.

**Piston Sequencer:** Three types of piston sequencers are available, and can be chosen at any time without corrupting a previous choice. These choices are made from the menu/player piston and are available and unique on every memory level:

1. **Next General.** Sequences to the next numeric general piston by the use of the '**Next (Up)**' and '**Previous (down)**' pistons. Indication is by means of '**ng#**' display on the LCD, numbering the last general piston selected either by the general pistons or the sequence pistons. This sequence will roll over to the next memory level and is zeroed by the '**GC**'.
2. **Extra Generals.** Additional unique general pistons that are 'set' or 'captured' in memory for the purpose of the piston sequencer only. Access to these extra generals is through use of the '**Next (Up)**' and '**Previous (down)**' pistons. Indication is by means of '**eg#**' display on the LCD, numbering these extra generals. This sequence is not zeroed by the '**General Cancel**' unless the '**GC**' is held in for more than 1 second.
3. **Record Piston Hits.** Unique sequence of 32 piston hits without having to hit any specific piston in the sequence. All generals, divisionals, reversibles, fortissimo, and '**Next**' (up) pistons will increment this memorized/stored sequence of piston hits. Only the '**Previous**' (down) piston will decrement this memorized/stored sequence of piston hits. Indication is by means of '**ps#**' display on the LCD, numbering this sequence. The '**General Cancel**' and '**PS On/Off**' pistons will zero and turn this feature off.

#### **'Next General'**

1. To turn this sequencer on/off use the '**Player/Menu**' piston. Indication is by a '**ng0**' on the LCD.

#### **'Extra Generals'**

1. To turn this sequencer on/off use the '**Player/Menu**' piston. Indication is by a '**eg0**' on the LCD.
2. To set an '**extra general**' piston, first choose the desired '**eg#**' with the '**PS Up/Next**'. Then hand select the stops/couplers desired and use the '**SET**'

- and **'PS ON/OFF'** pistons to capture these stops/couplers in the indicated **'eg#'**, OR use the **'SET'** and **'PS UP/NEXT'** to insert these selected stops/couplers in the next **'eg#'**, the LCD then incrementing the **'eg#'** by one. This moves all of the **'extra generals'** above this **'eg#'** up, technically making this an **'Insert'**. Stage 0 is not settable.
3. To **'Delete'** an **'eg#'** setting, that is moving all of the higher **'extra generals'** down one in the sequence and overwriting the current **'eg#'** setting, use the **'SET'** and **'PS DN/PREVIOUS'** pistons.

#### **'Record Piston Hits'**

1. Choose this type of sequencer using the **'Player/Menu'** piston.
2. To turn on the sequence, hit the **'PS On/Off'** piston. Indication is by a **'ps0'** on the LCD. Turn off the sequencer by hitting either the **'PS On/Off'** or the **'General Cancel'** piston.
1. To set a piston into the sequence, first choose the desired **'ps#'** with the **'PS Up/Next'** or **'PS DN/Previous'** pistons. Next, hold in the **'Set'** piston and select the piston to be in the sequence at this **'ps#'**. The **'ps#'** will automatically increment to the next stage.